FISHERIES DIVISION
MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Central Lake Michigan Management Unit

ISSUE 3
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Eric Askam, Fisheries Technician

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Tara Novak, Fisheries Assistant (Ludington/Manistee)

Kendra Kozlauskos, Fisheries Assistant (Petoskey/Charlevoix)

Gene Duncil, Fisheries Assistant (Frankfort/Onekama)

Gina Gittings, Fisheries Assistant (Pentwater/Whitehall)

Joe Thomas, Fisheries Assistant (Boardman River)

Jerek Gutierrez, Fisheries Assistant (Grand Traverse Bays)

Zach Smith, Summer Worker

Ben Molitor, Summer Worker

What is the CLMMU?

The Central Lake Michigan Management Unit (CLMMU) encompasses all of the waters that make up the watersheds that drain into the central portion of Lake Michigan. Our work area includes all or portions of the following counties; Emmet, Charlevoix, Antrim, Otsego, Crawford, Kalkaska, Grand Traverse, Benzie Leelanau, Manistee, Wexford, Missaukee, Roscommon, Clare, Osceola, Lake, Mason, Oceana, Newaygo, Mecosta, Montcalm, Kent, and Muskegon. Fisheries staff working in this unit include a Management Biologist who works out of the Traverse City Field Office, a Management Biologist and Unit Manager who work out of the Cadillac Operations Service Center, a Management Biologist who works out of the Muskegon Field Office , A Technician Supervisor, three Fisheries Technicians, a Fisheries Assistant Lead Worker, and two Summer Workers who work out of the Harrietta Field Office, and six Fisheries Assistants (creel clerks) who work out of various ports.

Summer Workers

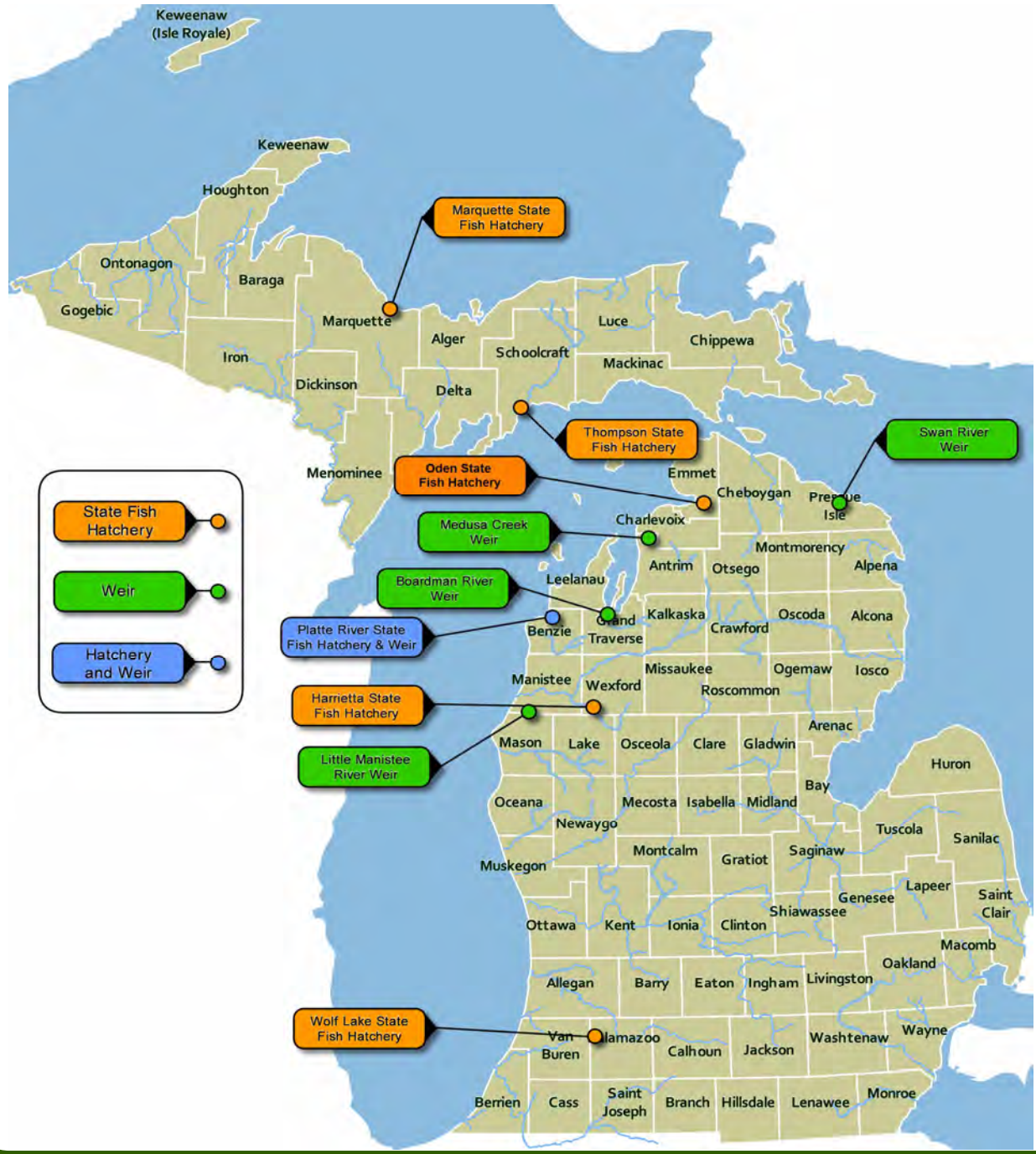
For the summer months of 2015, CLMMU was lucky enough to be able to hire two summer workers to help the field crew and biologists with various duties throughout the management unit. Zach Smith and Ben Molitor were able to spend the summer helping with walleye pond work, inland lake netting surveys, stream and small creek electrofishing surveys, and egg takes at various weir locations. These two were able to gain some hands on work experience in their chosen field, and our unit benefitted tremendously from their hard work, dedication, and willingness to teach the staff new things. Thanks for a great summer Ben and Zach!

Weir Operations

Did you know?

You can come watch our weir operations! Our weirs are open to the public while we are harvesting fish and conducting egg takes. Both the Boardman Weir and the Little Manistee Weir have thousands of visitors each spring and fall. Group tours are also available for educators and program coordinators.

Hatchery tours are also available; check out the map below to find out where you can go to visit a weir or a fish hatchery on your next road trip!



Weir Operations (cont.)

Little Manistee Steelhead Egg Take

For the 2015 steelhead egg take, the grates were lowered on the weir on March 17th. We performed our egg take operations in four days; April 14th , April 15th, April 21st, and April 22nd. During these four days we saw a total run size of 2,857 steelhead come through the Little Manistee Weir facilities; this was enough fish to provide us with a total of 4,091,461 eggs.

Boardman Weir Salmon Harvest

During the 2015 season the Boardman Harvest Weir was in place from September 1st through October 27th, and two harvests occurred during this time. For the first time in a number of years, our first harvest actually included an egg take; normally at this facility Chinook salmon and coho salmon are harvested and sent to a contractor for processing, while all other species are passed upstream. However given the record low numbers of Chinook this year, we conducted a delayed fertilization egg take at the Boardman, with eggs and milt collected and sent back to the Platte River State Fish Hatchery for mixing. While these eggs were not needed to reach our statewide egg numbers after all, it was a good way to practice an uncommon fertilization technique and gauge its success, should we ever need to use it again. During the fall of 2015 a total of 9 steelhead and 7 brown trout were passed upstream, while 185 Chinook salmon and 515 coho salmon were harvested for a total salmon harvest of 700 fish.

Little Manistee Salmon Egg Take/Harvest

For the fall 2015 Chinook egg collection season, the grates were lowered on August 14th and removed on October 21st. The total captured run of Chinook salmon was 654. Eggs were collected on October 5th at the Little Manistee Weir, and on the 6th and 7th eggs were collected at the Swan River Weir, for a total of 747,511 eggs collected. We passed a total of 51 steelhead, 259 coho salmon, 65 brown trout, and 231 Chinook salmon upstream into the Little Manistee River to spawn.

FROM THE KAYAK….CLMMU Creel Report

Mark Vaas

The Statewide Angler Survey Program (Creel Program) conducts angler surveys on various inland lakes and streams, as well as Great Lakes ports. Surveys of Great Lakes anglers were conducted by our Fisheries Assistants at the following ports during 2015; Charlevoix, Petoskey (Bear River), Elk Rapids, Grand Traverse Bays, Boardman River, Frankfort, Onekama (Portage Lake), Manistee, Ludington, Pentwater (Pentwater Lake), and Whitehall. These valuable surveys are used to obtain estimates on fish harvest rates and angling effort. Our clerks work some of the busiest ports in the state and do a phenomenal job collecting data!

2015 turned out to be a year of change in creel personal for CLMMU. Our long time Manistee/Ludington clerk, Joe Maka, took a transfer to the ports of Muskegon and Grand Haven. Joe had been making the drive from Spring Lake to his work station in Ludington for years. We will miss him and the job he did. The two hours he lost driving to and from work can be better spent with family. Thanks again Joe!

Tara Novak took over the helm for Manistee and Ludington ports. Tara had started out as a short term worker and did a great job as a creel clerk. Tara was hired as a fisheries technician out of Oden, in October. Manistee/ Ludington are now vacant.

Gina Gittings had worked in SLHMU for many years and transferred to our Pentwater/Whitehall ports in 2011. While there she did a great job and helped expand angler involvement for the ports and was thrilled instead of dismayed when Pentwater Lake was added to her creel. With increasing family needs down state Gina once again packed her bags and transferred to the Lake Erie Management Unit and will be working in the St. Clair area. We are sorry to see her go but understand her move and know she will do great for the division wherever she goes.

Last but by no means least, Jerek Gutierrez our East/West Traverse Bay clerk, was hired as a fisheries technician in the UP out of Crystal Falls. Jerek was recently married and has baby on the way. This is one heck of year of change for him and we are happy for him. It will be hard to replace him and the awesome job he did in Traverse City.

We will miss all of our clerks that have moved on and are thankful for those who remain to share their knowledge and experience with the new hires as we fill these positions. The only constant we have is that things will always change!

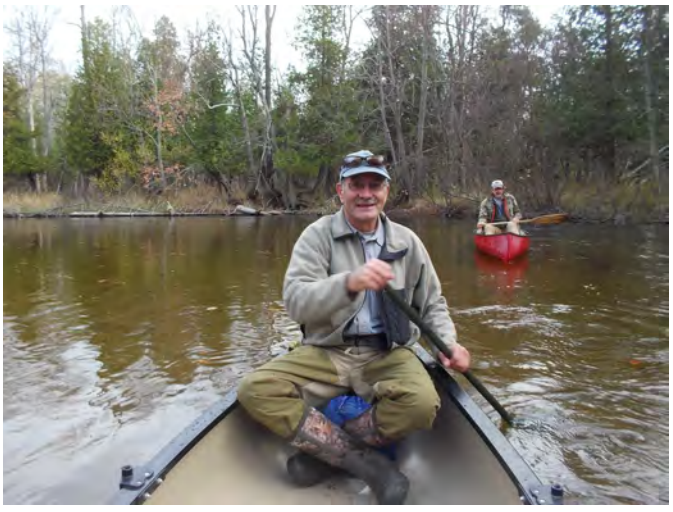
Wayne Anderson

In this year's spotlight CLMMU would like to acknowledge and thank longtime conservationist Wayne Anderson. Over the years Wayne has actively led volunteer efforts with many NW Michigan conservation organizations. His many achievements have improved fisheries resources and promoted conservation. Here is the impressive list of organizations Wayne is involved with:

MUCC - Life Member
Conservation Resource Alliance- Leader Member
Mason County Fin & Feather Club - Board of Directors - Chairman of Conservation Committee
Michigan Trout Unlimited - Life Member - Past Board Member of Pine River Area TU
Mason County Walleye Association - Board Member
Big Sable Watershed Committee - Chairman
Pere Marquette Watershed Council - Board Member
Hamlin Lake Preservation Society - President
Victory Township - Volunteer Improvements at Victory Park on Hamlin Lake
Volunteer - Hamlin Lake Mute Swan Control - Working with USDA
Commemorative Bucks of Michigan - Official Measurer

Wayne accomplishes this work quietly and often without much fanfare out of his intense passion for fish and wildlife conservation. As a gifted collaborator his ability to lead stewardship efforts with such a wide range of organizations in the CLMMU has been invaluable over the years.

In the CLMMU we have been fortunate to work with Wayne recurrently on these important and beneficial projects. For example, as the longtime chairman of the Big Sable Watershed Committee Wayne has fostered and overseen many habitat improvement projects on the Big Sable River. Out of his interest and concern for Hamlin Lake, he was almost singlehandedly responsible for the removal of invasive mute swans from the lake. Wayne's intricate knowledge of the streams, swamps, and forests joined with his dedication to conservation and stewardship has been very beneficial to the resources and watersheds of CLMMU and to everyone that recreates here.



Wayne is an avid angler for many different species in both lakes and streams. He is also a very skilled fly angler, who enjoys plying the waters of the Pere Marquette and Big Sable Rivers. If you happen to cross paths with Wayne Anderson please take a second to say hello and thank him for all the good work that has been accomplished through his leadership.

Maintenance Projects

Lake Dubonnet Dam Maintenance

The CLMMU crew performed maintenance on the dike and water holding structure that creates Lake Dubonnet in Grand Traverse County. These types of structures require regular maintenance because they are constructed mostly out of earthen materials. This is a popular fishing lake with a large State forest campground on its shoreline.

Numerous logs/brush were removed from the outlet box. Removal was necessary in order to provide an adequate flow of water and maintain a proper lake level. Vegetation on the dike was brush hogged, chain sawed, and hand clipped. The removal of brush/trees was necessary to maintain the structural integrity of the dike. These types of dikes are typically made out of clay, and tree roots can act as vectors for water leakage through the structure. There are plans to work with the local Road Commission in the spring of 2016 to fix the erosion spot on the east side dike, and to make some general road improvements.

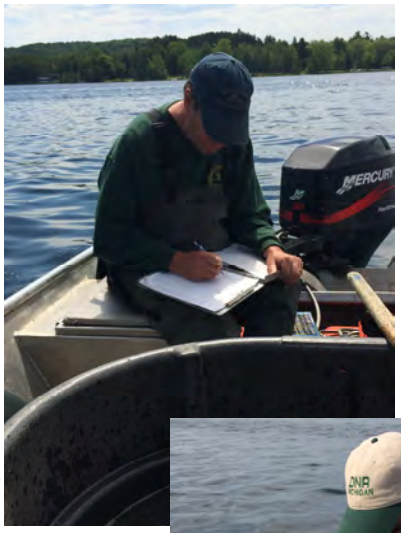
Little Manistee Weir Maintenance

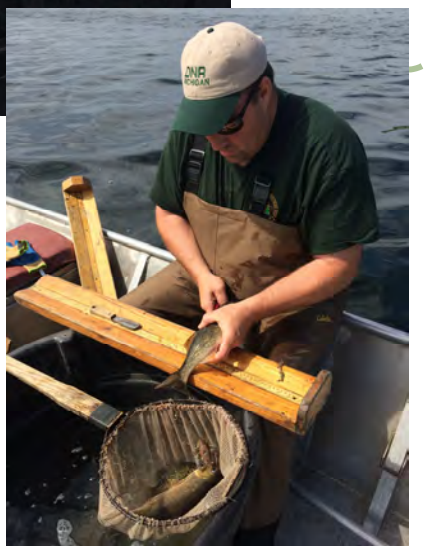
CLMMU staff had the opportunity to perform some much need maintenance and improvements down at the Little Manistee Weir over the summer. Dam boards were replaced in boxes at top of fish ladder, and additional dam boards were made for pond foot boards to manipulate flow in ponds. All of the cement pond head boxes and dirt pond foot boxes were cleaned out, we repaired and treated boards for wood walls in dirt ponds, and leveled the bottoms in dirt ponds. As part of the ongoing Little Manistee Weir Enhancement Project; pavilion updates were made and the parking lot was regraded. Our standard maintenance such as mowing and trimming, was completed and we were able to make some upgrades to paint, electrical outlets, and an improved glove drying rack.

Lake, River, and Stream Surveys

During the spring, summer, and early fall of 2015 the CLMMU staff completed 43 different surveys. These surveys included spring and fall Serns Index surveys, stream and river electrofishing surveys, and combination netting and electrofishing lake surveys. A total of 9 different lakes and 22 different streams were surveyed (some streams had multiple sampling locations). Those waterbodies include;

Arbutus Lake
Big Star Lake
Boardman River
Betsie River
Brooks Creek
Carter Creek
Cedar Creek
Crystal Lake
Davis Creek
Freeman Creek
Houghton Lake
Hersey River
Little Manistee River
Lake Bellaire
Lemon Creek
Little Bear Creek
Little Beaver Creek
Little Platte Lake Unnamed Tributary
Lower Herring Lake
Manistee River
Maury Creek
Muskegon River
North Branch Boyne River
North Branch Manistee River
North Branch Platte River
Olsen Creek
Pere Marquette River
Pere Marquette Unnamed Tributaries
Platte River
Spider Lake
South Lake Leelanau
Sanborn Creek
Upper Herring Lake
Unnamed Lake MI Tributaries (Manistee Co.)
Wheeler Creek





Special Projects

- Assisted Platte River Hatchery by collecting trout and sculpin samples from Brundage Pond and Brundage Creek for disease analysis at MSU Laboratory.
- Assisted Harrietta Hatchery by collecting trout and sculpin samples from settling pond and Slagle Creek for disease analysis at MSU Laboratory.
- Assisted Oden Hatchery with egg collection from brown trout broodstock.
- All three Fisheries Technicians participated in a Minnow ID course.
- Assisted with the installation and removal of the Maritime Academy net for the Traverse City Kids Free Fishing event.
- Assisted with planning and working at both the Traverse City Kids Free Fishing Event and the Veronica Valley Kids Free Fishing Event.
- Participated in Team Training.
- Participated in the state-wide Boom Shocker testing.
- Participated in Hydro Lab training.
- Multiple staff completed a database training course in Lansing.
- Participated in the state-wide Lake trout aging workshop.

Cole Creek— Mark Tonello

Overnight on June 13, 2008, the northwestern portion of the lower peninsula of Michigan received 9-12 inches of rain in a short amount of time. This intense rainfall led to the failure of many road/stream crossings across the region as small streams quickly became raging torrents. One crossing that failed was the 14 Road crossing of Cole Creek in Wexford County, near the village of Sherman. Prior to the failure, the crossing was well-known to the Wexford County Road Commission (WCRC). The stream flows through a deep valley where 14 Road crosses it. Because it was a gravel road with steep slopes leading down to the crossing, it was constantly eroding, forcing frequent maintenance by WCRC. The road shoulders even had springs that constantly flowed and created erosion. In addition, the culvert sat under 40-50 feet of earth that had been piled on top of it to lessen the slopes for vehicles traveling 14 Rd. It was also a lightly traveled road, making it a lower priority for replacement or improvement. No one can remember when the crossing was installed, but according to Karl Hanson, Engineer for the WCRC, it was likely fairly early in the 1900s.

Once they received reports of the damaged crossing on June 13, the WCRC closed the road. Until recently, it remained as it had been since that day. No funds could be found for such an expensive replacement program on such a lightly used road. The culvert for the crossing had always been undersized and incorrectly placed, leading to a "perched" situation in which fish passage was not possible and erosion was a constant issue. In effect, the crossing acted like a dam on the stream. Cole Creek is a tributary to the Manistee River, and it supports self-sustaining populations of brook and brown trout. Once WCRC realized that funding would not be forthcoming for a replacement project, they began to research the possibility of removing the crossing.

After consultation with Fisheries Biologist Mark Tonello, WCRC applied for and were rewarded a Consumers Energy Habitat Improvement Account (HIA) grant in 2011. Several years later, the work was completed and the crossing was removed. The stream was daylighted, and the valley slopes stabilized. One challenge during the project was the intense stream gradient. Over the several hundred foot stream reach affected by the project, the stream fell more than ten feet! Such gradient is more typically seen in mountain streams. To ensure that they could stabilize the streambanks, WCRC used riprap along the margins of the stream and installed four check dams that were about two feet high. Over time, as vegetation grows and the valley stabilizes, the check dams will be slowly removed, eventually resulting in a swift, free- flowing stream complete with rapids! This project was a win-win for all parties involved. The WCRC will no longer have to maintain the crossing at great expense, and the stream will be much healthier. This project was an excellent collaboration between Consumers Energy, WCRC, and MDNR.

Left and bottom; Cole Creek crossing before removal ~ 2012.

Right and top; Cole Creek after the stream crossing was removed.

Muskegon River - Rich O'Neal

Fishing the Muskegon River: Types of Fishing and Where to Fish

The Muskegon River is 214 miles long, from its origin near Roscommon, downstream to Muskegon where it empties into Lake Michigan. The main branch of the river flows through seven counties and contains three large lakes and four impoundments. In some locations the river is slow moving with sandy bottoms, and other areas have fast water with gravel and stone bottoms. The various types of habitats in this system support a wide variety of fisheries.

Angler surveys were conducted in all of the lakes, impoundments and stream segments of the river, from 1999 through 2005. Estimates from these surveys indicate that 1.8 million fish were caught by anglers during a one year period. For every 100 hours of fishing, 124 fish were caught, 93 were harvested, and 31 were released. Twenty-eight species of fish were caught, with yellow perch, bluegill, rainbow smelt, pumpkinseed and rainbow trout comprising 85.4% of the total. Other species that had more than 10,000 fish in the annual catch included rock bass, smallmouth bass, black crappie, northern pike, walleye, Chinook salmon, brown trout, and largemouth bass.

The estimated value of fish fillets from harvested fish was $707,889. Houghton Lake, Higgins Lake, the river section between Croton Dam and Newaygo, and Muskegon Lake accounted for 91% of this value. Yellow perch, bluegill, northern pike, rainbow trout, walleye, pumpkinseed, Chinook salmon, and smallmouth bass accounted for 88.7% of the total fish fillet value.

An estimated 1,473,420 angler-hours were expended on the river during a one year period. The annual economic value of the fisheries in the mainstem of the Muskegon River was estimated at $12.4 million.

For more detailed information on the fisheries of the Muskegon River, refer to the Muskegon River Angler Survey Report, 1985-2005 http://www.michigan.gov/documents/dnr/CreelSurvey-MuskegonRiver-2005_512303_7.pdf

Are you looking for a public access location to fish on the Muskegon River? The Muskegon River Fishing Access Site Information document http://www.michigan.gov/documents/dnr/MuskegonRiverFishingAccessSiteInformation_512308_7.pdf provides information on 57 of the principal public access sites on the main branch of the Muskegon River, between Higgins Lake and Lake Michigan. Detailed driving directions, GPS coordinates, and links to local visitor information websites are provided for each access site.

South Lake Leelanau – Heather Hettinger

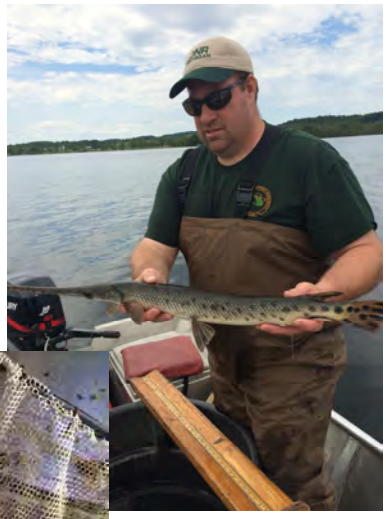
Lake Leelanau in Leelanau County is one of the most popular lakes in our unit– it is divided into two major basins, North Lake Leelanau and South Lake Leelanau, which both offer many different opportunities for anglers. For the 2015 season, we conducted a survey on South Lake Leelanau, which is known for its naturally reproducing walleye population, brown trout, yellow perch, and smallmouth bass.

The survey took place in two parts- one week of netting in June, and a night of electrofishing in July. We used several different types of nets in the survey, including large mesh fyke nets, small mesh fyke nets, seines, trap nets, and gill nets.

Between the two survey techniques we caught a total of 16,966 fish, the vast majority of which were actually forage fish! A little over 13,000 mimic shiners were caught, followed by 1,142 rock bass, 911 white sucker, 518 bluntnose minnow, 289 yellow perch, 270 longnose gar, and 174 walleye. Other species caught included brown bullhead, bowfin, brown trout, bluegill, cisco, creek chub, common shiner, hybrid sunfish, Iowa darter, Johnny darter, logperch, largemouth bass, longear sunfish, northern pike, pumpkinseed, sand shiner, smallmouth bass, and yellow bullhead,

The fish were collected in this survey all looked extremely healthy, in particular the forage base. The one exception might be walleye, which are growing at 2.9 inches below State average. Aside from slow growth, walleye appear to be flourishing in the South Lake. One hundred and seventy four walleye from 6 inches up to 20 inches were collected, 34% of which were of legal size. Walleye from Age-1 to Age 12, plus a handful of fish Age-17 and Age 20 were also collected.

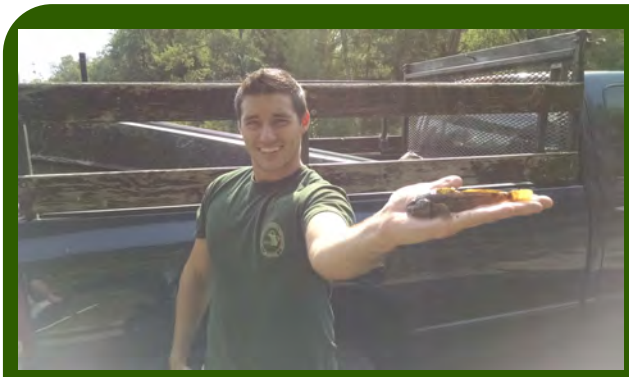
A survey for North Lake Leelanau, known for its lake trout, brown trout, lake herring, and whitefish fisheries, is planned for the summer of 2016.



Walleye Rearing Ponds

In 2015 CLMMU operated three walleye rearing ponds; Beaver Island, Mason County, and I-75. Both Beaver Island and Mason County are ponds where we provide the fish, and cooperative agreements with sportsman's groups allow those folks to rear the walleye until they are ready to be stocked. A total of 24 different lakes in CLMMU were stocked during 2015 with walleye. Thanks to SLMMU, LEMU, and SLHMU for helping us to meet our needs for all of these lakes, and once again to the Beaver Island Wildlife Club and the Mason County Walleye Association for all of their hard work!

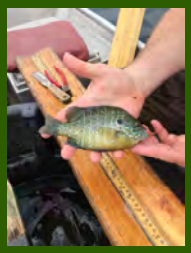
Waterbody Stocked	County	Number	Ave. Size
Mason County Pond			
Portage Lake	(Manistee)	52,301	1.4"
Hamlin Lake	(Mason)	150,455	1.4"
Bear Lake	(Manistee)	22,561	1.4"
Lake Missaukee	(Missaukee)	8,751	1.4"
Hart Impoundment	(Oceana)	4,611	1.9"
I-75 Pond			
Lake Margrethe	Crawford)	15,042	1.4"
Baptist Lake	(Newago)	1,547	6.1"
Beaver Island Pond			
Rearing cycle failed			
Surplus Walleye from the Southern Lake Michigan Management Unit			
Lake Missaukee	(Missaukee)	90,342	1.5"
Muskegon River	(Evart)	30,207	1.5"
Muskegon River	(Crawford Park)	30,208	1.5"
Nichols Lake	(Newago)	8,430	1.5"
Hart Impoundment	(Oceana)	11,943	1.5"
White Lake	(Muskegon)	128,557	1.5"
Lower Herring	(Benzie)	16,158	1.5"
Upper Herring	(Benzie)	19,108	1.5"
Bear Lake	(Manistee)	68,563	1.5"
Rose Lake	(Osceola)	27,538	1.5"
Big Star	(Lake)	46,084	1.5"
Surplus walleye from the Lake Erie Management Unit			
Lake Margrethe	(Crawford)	49,125	1.5"
Surplus walleye from Southern Lake Huron Management Unit			
Lake Charlevoix	(Charlevoix)	202,914	2.1"
Paradise Lake	(Emmet)	56,626	2.1"
Lake 27	(Otsego)	12,000	2.1"
Pickerel Lake	(Kalkaska)	22,189	2.1"
Cub Lake	(Kalkaska)	19,140	2.1"
Lake Margrethe	(Crawford)	91,952	2.1"
Fry Plants			
Fife Lake	(Grand Trav.)	1,200,000	0.11"
Silver Lake	(Grand Trav.)	1,050,000	0.11"





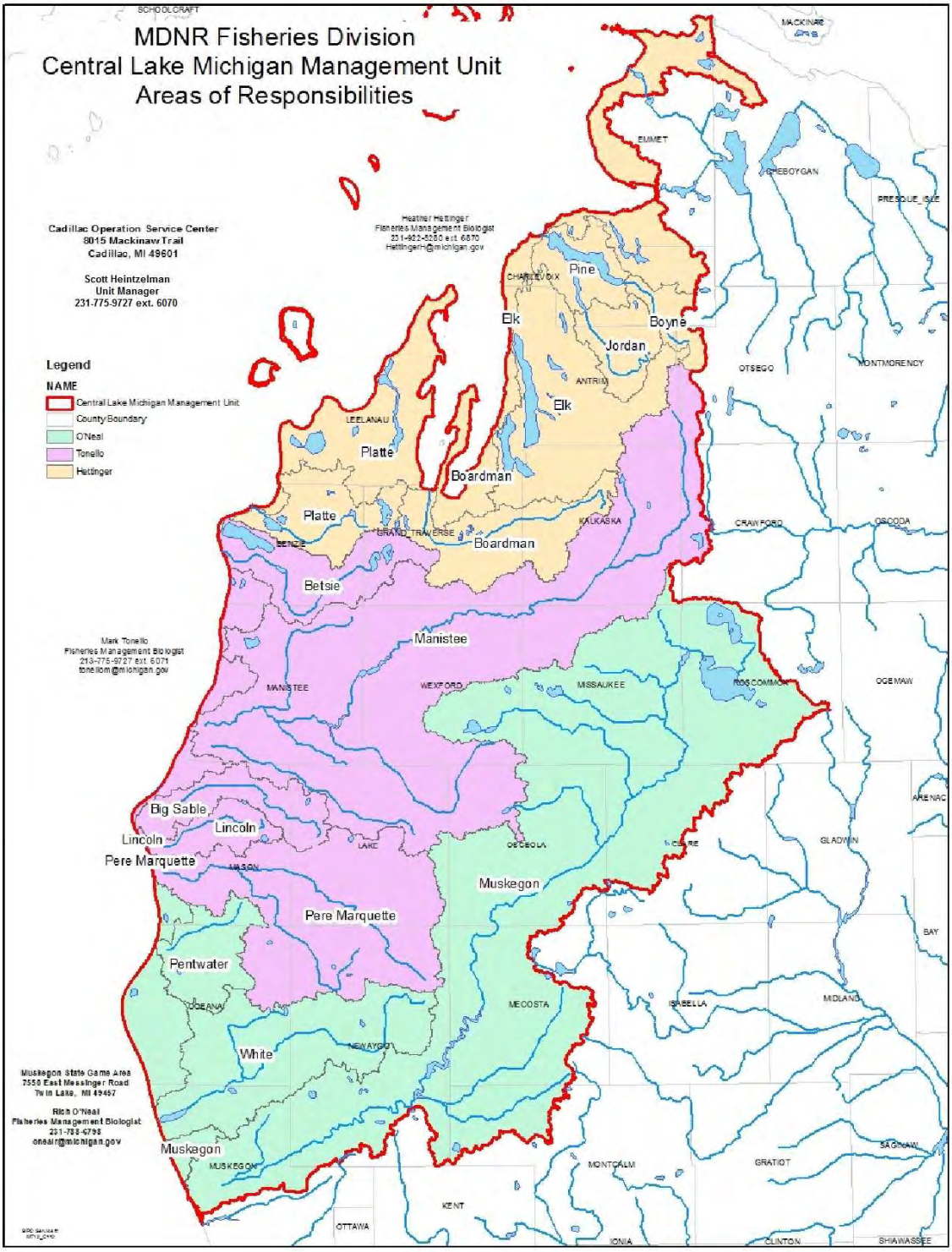







To obtain information on lake or stream surveys from this year or years prior or to ask any questions, please feel free to contact us. Use the map below to select the most appropriate biologist to contact:



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